

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the Application are reproduced below.

1. (Currently Amended) A network comprising:

a first tier of forwarding agents ~~connected to a first tier of network devices~~ coupled to a client via a network, wherein the client is operable to generate a request that includes a packet;

a second tier of forwarding agents connected to a ~~second tier~~ plurality of network devices; and

a service manager configured to:

receive a the packet from a selected one of the forwarding agents included in the first tier of forwarding agents;

~~determine the tier of the forwarding agent; and~~

send ~~an~~ a first tier instruction to the selected forwarding agent included in the first tier of forwarding agents directing the selected forwarding agent to forward the packet to a ~~network device~~ selected one of a plurality of firewalls that is coupled ~~connected to the first and second tiers tier of forwarding agents that includes the forwarding agent and that is assigned by the service manager, wherein the selected firewall forwards the packet on to a selected one of the forwarding agents in the second tier;~~

receive the packet back from the selected forwarding agent in the second tier;  
and

respond to receiving the packet by providing a second tier instruction for the selected forwarding agent in the second tier to forward the pack on to a selected one of the plurality of network devices.

2. (Currently Amended) A network as recited in claim 1, wherein the ~~first tier of network devices include state tracking network devices that keep track of the state of connections and wherein the~~ service manager is further configured to:

~~in the event that the tier of the forwarding agent is connected to one of the state tracking network devices,~~ determine whether the packet belongs to a connection that has already been assigned to a selected one of the state tracking network device firewalls; and

in the event that the connection has been assigned to the ~~state tracking network device~~ selected firewall, selecting the ~~same state tracking network device~~ selected firewall to receive the packet.

3. (Canceled)

4. (Currently Amended) A network as recited in claim 3 ~~2~~, wherein the selected firewall is initially chosen by the service manager for ~~a first the~~ packet that requests ~~a the~~ connection, and wherein the ~~same selected~~ firewall is chosen for ~~a second an additional~~ packet that responds to the ~~first packet~~.

5. (Currently Amended) A network as recited in claim 1, wherein the first tier of the forwarding ~~agent agents~~ is determined by ~~the a~~ subnet of the first tier of forwarding agent agents.

6. (Currently Amended) A network as recited in claim 1, wherein the first tier of the forwarding ~~agent agents~~ ~~is are~~ determined by ~~the a~~ port of the first tier of forwarding agent agents.

7. (Currently Amended) A network as recited in claim 1, wherein the first tier of the forwarding ~~agent agents~~ ~~is are~~ determined by ~~the an~~ inclusion of the ~~IP address addresses~~ of the first tier of forwarding agent agents included in a list for the tier.

8. (Currently Amended) A network as recited in claim 1, wherein the second tier of forwarding agents are also connected operable to communicate with the first tier of network devices forwarding agents.

9. (Currently Amended) A service manager configured to distribute packets to multiple tiers of forwarding agents comprising:

~~a network interface configured to receive packets from a first tier of forwarding agents connected to a first tier of network devices and a second tier of forwarding agents connected to a second tier of network devices; and~~

~~a processor configured to:~~

~~determine the tier of a sending forwarding agent that sends a packet; and~~

~~send an instruction to the sending forwarding agent directing the sending forwarding agent to forward the packet to a network device connected to the tier of forwarding agents that includes the sending forwarding agent.~~

receive a packet from a selected one of a plurality of forwarding agents included in a first tier of forwarding agents, the packet being generated by a client that is coupled to the selected forwarding agent included in the first tier of forwarding agents;

send a first tier instruction to the selected forwarding agent included in the first tier of forwarding agents directing the selected forwarding agent to forward the packet to a selected one of a plurality of firewalls that is coupled to the first tier of forwarding agents, wherein the selected firewall forwards the packet on to a selected one of a plurality of forwarding agents included a second tier of forwarding agents;

receive the packet back from the selected forwarding agent in the second tier;  
and

respond to receiving the packet by providing a second tier instruction for the selected forwarding agent in the second tier to forward the pack on to a selected one of a plurality of network devices.

10. (Currently Amended) A service manager as recited in claim 9, wherein the ~~first tier of network devices include state tracking network devices that keep track of the state of connections and wherein the~~ processor is further configured to:

~~in the event that the tier of the forwarding agent is connected to one of the state tracking network devices,~~ determine whether the packet belongs to a connection that has already been assigned to a selected one of the state tracking network device firewalls; and

in the event that the connection has been assigned to the ~~state tracking network device~~ selected firewalls, selecting the selected ~~same state tracking network device~~ firewall to receive the packet.

11. (Canceled)

12. (Currently Amended) A service manager as recited in claim 11 ~~10~~, wherein the selected firewall is initially chosen by the service manager for ~~a first the~~ packet that requests ~~a the~~ connection, and wherein the ~~same selected~~ firewall is chosen for ~~a second an additional~~ packet that responds to the ~~first~~ packet.

13. (Currently Amended) A service manager as recited in claim 9, wherein the first tier of the forwarding agent agents is determined by ~~the a~~ subnet of the first tier of forwarding agent agents.

14. (Currently Amended) A service manager as recited in claim 9, wherein the first tier of the forwarding agent agents ~~is are~~ determined by ~~the a~~ port of the first tier of forwarding agent agents.

15. (Currently Amended) A service manager as recited in claim 9, wherein the first tier of the forwarding agent agents ~~is are~~ determined by ~~the an~~ inclusion of ~~the IP address addresses~~ of the first tier of forwarding agent agents included in a list ~~for the tier~~.

16. (Currently Amended) A method of distributing packets to multiple tiers of forwarding agents comprising:

~~receiving packets at a service manager from a first tier of forwarding agents connected to a first tier of network devices and a second tier of forwarding agents connected to a second tier of network devices;~~

~~determining the tier of a sending forwarding agent that sent a packet; and~~

~~sending an instruction to the sending forwarding agent directing the sending forwarding agent to forward the packet to a network device connected to the tier of forwarding agents that includes the sending forwarding agent.~~

receiving a packet from a selected one of a plurality of forwarding agents included in a first tier of forwarding agents, the packet being generated by a client that is coupled to the selected forwarding agent included in the first tier of forwarding agents;

sending a first tier instruction to the selected forwarding agent included in the first tier of forwarding agents directing the selected forwarding agent to forward the packet to a selected one of a plurality of firewalls that is coupled to the first tier of forwarding agents, wherein the selected firewall forwards the packet on to a selected one of a plurality of forwarding agents included a second tier of forwarding agents;

receiving the packet back from the selected forwarding agent in the second tier; and

responding to receiving the packet by providing a second tier instruction for the selected forwarding agent in the second tier to forward the pack on to a selected one of a plurality of network devices.

17. (Currently Amended) A computer program product for distributing packets to multiple tiers of forwarding agents, the computer program product being embodied in a computer readable medium and comprising computer instructions for code such that when executed is operable to:

~~determining a corresponding tier of a sending forwarding agent that sent a packet received at a service manager from a first tier of forwarding agents connected to a first tier of network devices and a second tier of forwarding agents connected to a second tier of network devices; and~~

~~sending an instruction to the sending forwarding agent directing the sending forwarding agent to forward the packet to a network device connected to the corresponding tier of forwarding agents.~~

receive a packet from a selected one of a plurality of forwarding agents included in a first tier of forwarding agents, the packet being generated by a client that is coupled to the selected forwarding agent included in the first tier of forwarding agents;

send a first tier instruction to the selected forwarding agent included in the first tier of forwarding agents directing the selected forwarding agent to forward the packet to a selected one of a plurality of firewalls that is coupled to the first tier of forwarding agents, wherein the selected firewall forwards the packet on to a selected one of a plurality of forwarding agents included a second tier of forwarding agents;

receive the packet back from the selected forwarding agent in the second tier;  
and

respond to receiving the packet by providing a second tier instruction for the selected forwarding agent in the second tier to forward the pack on to a selected one of a plurality of network devices.

18. (Currently Amended) A service manager configured to distribute packets to multiple tiers of forwarding agents comprising:

~~means for receiving packets from a first tier of forwarding agents connected to a first tier of network devices and a second tier of forwarding agents connected to a second tier of network devices;~~

~~means for determining the tier of a sending forwarding agent that sends a packet; and~~

~~means for sending an instruction to the sending forwarding agent directing the sending forwarding agent to forward the packet to a network device connected to the tier of forwarding agents that includes the sending forwarding agent.~~

means for receiving a packet from a selected one of a plurality of forwarding agents included in a first tier of forwarding agents, the packet being generated by a client that is coupled to the selected forwarding agent included in the first tier of forwarding agents;

means for sending a first tier instruction to the selected forwarding agent included in the first tier of forwarding agents directing the selected forwarding agent to forward the packet to a selected one of a plurality of firewalls that is coupled to the first tier of forwarding agents, wherein the selected firewall forwards the packet on to a selected one of a plurality of forwarding agents included a second tier of forwarding agents;

means for receiving the packet back from the selected forwarding agent in the second tier; and

means for responding to receiving the packet by providing a second tier instruction for the selected forwarding agent in the second tier to forward the pack on to a selected one of a plurality of network devices.